



# Transfer Station Composting

Presented to the Village of Los Lunas Council

By

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# What is Composting?

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# Why Composting?

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- Integrated approach to solid waste management
- Divert green waste from the landfill
- Extend life of WWTP sludge surface disposal site
- Produce a beneficial product from Village green waste
- Modernize approach to green waste and WWTP sludge disposal
- Enhance Village image
- Potential future source of revenue

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## Project History

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- Village pursued composting previously
- 2013 Wastewater Treatment and Sludge Management PER
  - Considered composting of WWTP sludge at WWTP
  - Determined not recommended for WWTP due to availability of bulking materials & required processing
- Village identified Transfer Station as site for composting
- New sludge management facilities at WWTP will be better equipped to process sludge for composting



# Transfer Station Site



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# Types of Composting

- Windrow (Most Common)
- Static, Aerated Pile
- In-Vessel



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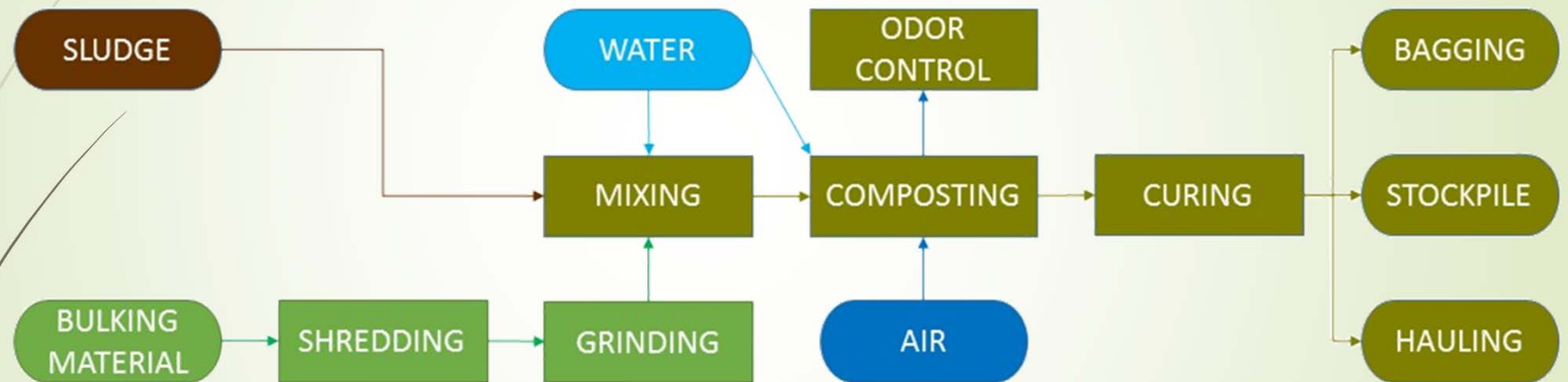


# Composting Regulatory Requirements

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- NMAC Solid Waste Rules (Title 20 Chapter 9)
- EPA Sludge Disposal Rules (CFR Title 40 Part 503)
  - Pollutants (metals)
  - Vector attraction (birds, insects, etc.)
  - Pathogens
- WWTP produces Class B biosolids
- Composting widely used to achieve Class A biosolids

# Composting Facility Design Elements



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# Required Equipment

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- Material Moving: Skid-steer (now), front-end loader (future)
- Chipping vs. Shredding/Grinding: Chipper (now), Shredder + Grinder (future)
- Material Mixer: Stationary auger mixer w/ belt conveyor (now & future)
- Composting Vessels: 4 + 1 biofilter (now), Up to 20 + 4 biofilters (future) , Hooklift (now)
- Finished Material Screening (based on preference, not required)
- Leachate collection system, reuse water holding tank, supplemental moisture pump
- Enclosed building to reduce dust & odors (future)

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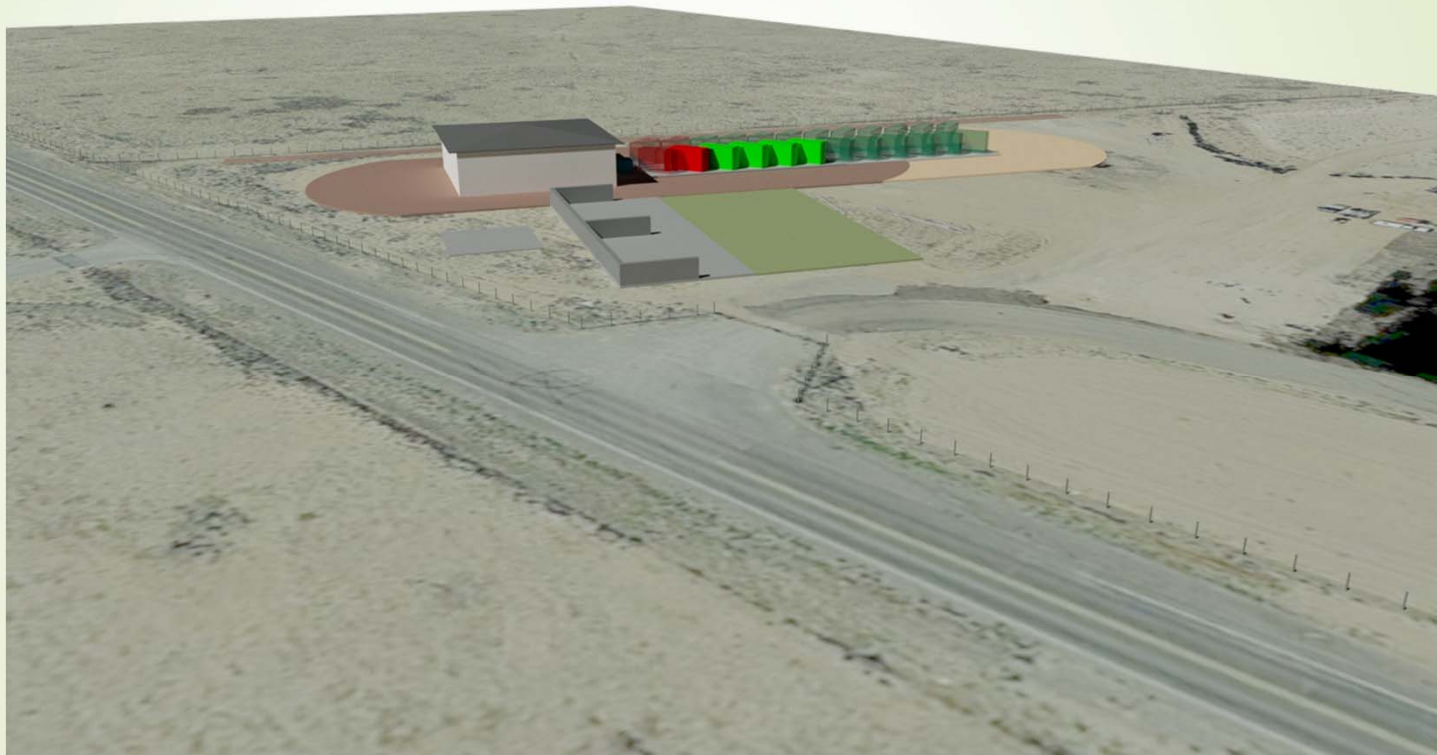
# Site Improvements & Phasing



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## Site Improvements & Phasing

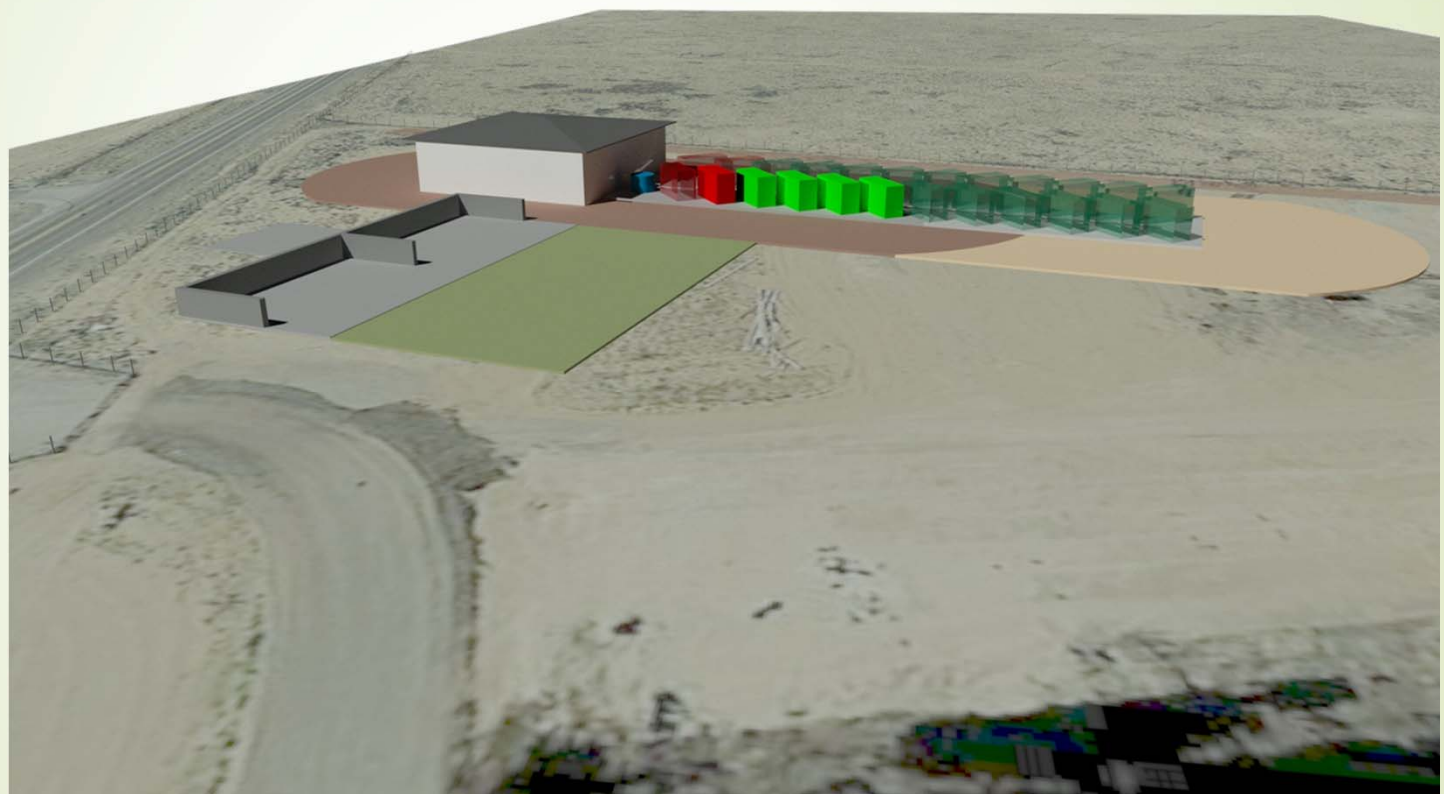
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## Site Improvements & Phasing



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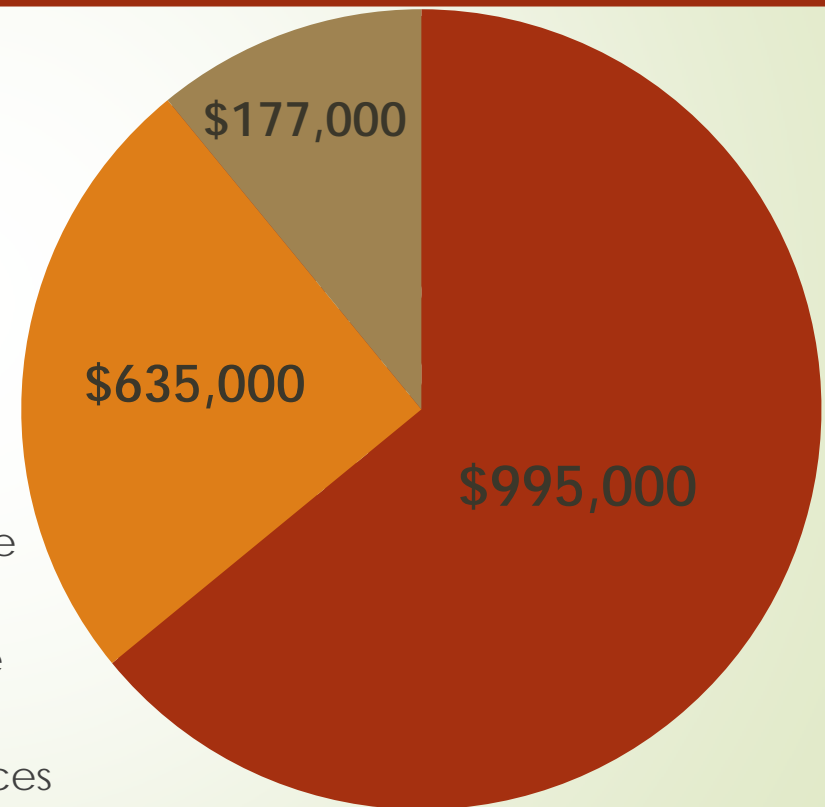


# Engineer's Opinion of Probable Cost – Phase 1

- Equipment: Mixer, Conveyer, Hook-Lift Truck, Supplemental Moisture System, Composters
- Site Work: Grading, Drainage, Roads, Electrical
- Total Professional Engineering for Design / Construction

## Potential Cost Offsets

- Reduction in landfilled waste
- Defers/eliminates need to acquire more land for sludge disposal
- Potential for resale as marketable product
- Landscaping costs for green spaces



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# Implementation Plan

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Design: Oct. 2017 – May 2018  
Bidding: June 2018 – Aug. 2018  
Construction: Aug. 2018 – Apr. 2019



**Site Work Design  
and Construction**



**Equipment  
Procurement  
(Sole Source)**

Composting Vessels,  
Mixer and Conveyor,  
Hook-Lift Truck

May 2018 – April 2019

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# THANK YOU FOR YOUR TIME

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# Required Equipment: Material Moving

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Skid-Steer (Now)



Front End Loader (Future)



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# Required Equipment: Chipping/Shredding/Grinding

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## Required Equipment: Material Mixing



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# Required Equipment: Composting Vessels



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# Required Equipment: Finished Material Screening

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## Required Equipment: Leachate/Condensate/Supplemental Moisture



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# Required Equipment: Hooklift Truck

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# Future Building Enclosure



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